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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,139	03/01/2002	Scott L. Palmer		2704

7590 11/17/2003

Connolly Bove Lodge & Hutz LLP  
1990 M Street N W  
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Washington, DC 20036-3425

EXAMINER
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KOEHLER, ROBERT R

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 11/17/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

CLO 11

<b>Office Action Summary</b>	Applicant(s)	
	PALMER ET AL.	
	Applicant N .	Art Unit
	10/085,139	1775
	Examiner	
	Robert R. Koehler	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2003. (Response)
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8 and 10-19 is/are rejected.
- 7) ☒ Claim(s) 3,6 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 7, 8, and 10 to 19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,863,669 (Miller), the cited prior art of record.

Miller discloses a brazing sheet having an aluminum alloy core material and at least one clad layer on the core material (e.g., a suitable silicon-containing aluminum alloy brazing layer), wherein the aluminum alloy core material contains the same alloying elements as claimed by the applicants (Mn, Cu, Mg, Si, Fe, Ti, Cr, Zr, V) with alloy elemental ranges which overlap applicants' claimed alloy elemental range limits. Prior art which teaches a range within, overlapping, or touching the claimed range anticipates if the prior art range discloses the claimed range with sufficient specificity. See MPEP 2131.03 and Ex parte Lee, 31 USPQ2d 1105 (Bd. Pat. App. & Inter. 1993). Miller does not teach or reasonably suggest the inclusion of nickel, scandium, and/or hafnium in the aluminum alloy core material. The brazing sheet disclosed by Miller can be manufactured by hot rolling the aluminum alloy core material sheet and the brazing layer or layers followed by artificial aging at an elevated temperature (e.g., 100° to 250° C). The Examiner has interpreted "hot rolling" of the aluminum alloy core material sheet and the brazing layer(s) to include "brazing" of these two sheet materials because the final sheet product disclosed by Miller must consist of metallurgically-joined layers, and "hot rolling" of aluminum

alloys normally utilizes process temperatures that are sufficiently high to be considered as "brazing." See line 36 in column 3 to line 67 in column 5, especially lines 1 to 67 in column 5. Miller discloses improved mechanical properties (e.g., improved yield strength) for the brazing sheet material which overlap applicants' claimed ranges of yield strength values. See line 66 in column 3 to line 6 in column 4 and lines 1 to 67 in column 5.

***Allowable Subject Matter***

Claims 3, 6, and 9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed on August 25, 2003 have been fully considered but they are not persuasive. The Miller patent provides sufficient information about suitable aluminum alloy compositions for usage in an aluminum alloy brazing sheet material in order that a person skilled in the art of aluminum alloy metallurgy can select the same alloying elements as claimed by the applicants and useful alloy element compositions (as weight percent) that overlap applicants' claimed alloy elemental range limits. Although the applicants doubt that a person skilled in the art of aluminum alloy metallurgy would be able to select the appropriate alloying elements and the appropriate alloy elemental compositions according to the disclosure by Miller, the Examiner continues to believe that "sufficient specificity" has been demonstrated in the Miller patent because the multiple alloy elemental ranges are particularly associated with specific alloying elements and the permissible amounts of alloying elements are specifically defined in the form of numerical ranges containing specific limits. The Examiner points out that Miller discloses the

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same primary alloying elements (i.e., Mn, Cu, Mg, Si, and Fe) for aluminum alloys as claimed by the applicants, and other alloying elements such as titanium are also optional in applicants' claims; note applicants' claim 1. Therefore, under 35 U.S.C. § 102(b), Miller continues to disclose the same alloying elements and the same alloy elemental compositions whenever the Miller aluminum alloy composition ranges overlap applicants' claimed composition range limits. Also, the information disclosed in the Miller patent cannot be limited by the specific examples provided in that patent. Although Miller does not provide aluminum alloy compositions which fall exactly within applicants' claimed alloy elemental ranges, the decision provided in Ex parte Lee clearly permits a rejection under 35 U.S.C. § 102 whenever the prior art numerical ranges overlap applicants' claimed numerical ranges and such overlap is accompanied with a disclosure having "sufficient specificity." The Examiner also points out that Miller discloses the same improvements in corrosion resistance and yield strength as claimed by the applicants. Note that the yield strength values for the aluminum alloys disclosed by Miller overlap applicants' claimed yield strength values (i.e., at least 70 MPa according to line 1 in column 4). The Examiner has not relied on any inherent mechanical properties by the aluminum alloy compositions disclosed by Miller. Allowable subject matter has been indicated in both Office actions, and the Examiner continues to believe that applicants' independent claims should be amended to include the indicated allowable subject matter.

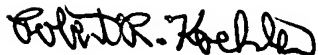
### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is (703) 308-1974. The Examiner can normally be reached on Tuesday to Friday from 8:30 AM to 6:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on (703) 308-3822. The fax phone number for this Art Unit is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.



ROBERT R. KOEHLER  
PRIMARY EXAMINER

Art Unit 1775  
November 16, 2003